Intelligent. Reliable. Efficient.
Voith TurboBelt TPXL family

The increasing need for raw materials places continuously growing demands on conveying capacity in mining. With double the power transmission capability in the same installation space, the Voith TurboBelt TPXL family is specifically designed to meet the requirements of belt conveyor drives.

Voith offers a fill-controlled fluid coupling providing wear-free power transmission with a precise, easy-to-use torque control. Its compact design paired with the integrated control logic makes it a highly efficient drive solution. Rugged, robust and compact, the TurboBelt TPXL family is engineered to the highest standards for greater availability and reliable operation.
TurboBelt TPXL at a glance

Your benefits

+ Mechanical protection of all conveyor components
+ Up to 98.5 % efficiency
+ Innovative speed & torque control logic
+ Lower commissioning time & cost
+ Easy installation & handling
+ Self-diagnosis functions & remote maintenance
+ Reliable operation even in harsh environments
+ Seamless integration into plant control system
+ Reduced maintenance costs of drives
+ Increased production capacity

Sectional drawing of a TurboBelt TPXL coupling

1 Tank
2 Pump
3 Cooler
4 Pump wheels
5 Turbine wheels
Technical data

Start-up time  60 seconds up to several minutes
Control  TurboBelt TPXL Control
Thermal capacity  Active cooling, unlimited starts
Thermal monitoring  Integrated
Special features  Intelligent torque and speed control logic
Remote access
Creep speed
Permanent stand-by operation
Options  Self supported version
Splash-Guard for motor attached version
ATEX, MSHA, MA certification

Power ranges

<table>
<thead>
<tr>
<th>Speed [rpm]</th>
<th>1000</th>
<th>1200</th>
<th>1500</th>
<th>1800</th>
</tr>
</thead>
<tbody>
<tr>
<td>TurboBelt 500 TPXL</td>
<td>–</td>
<td>260 kW</td>
<td>500 kW</td>
<td>600 kW</td>
</tr>
<tr>
<td>–</td>
<td>348 HP</td>
<td>–</td>
<td>804 HP</td>
<td></td>
</tr>
<tr>
<td>TurboBelt 800 TPXL</td>
<td>–</td>
<td>415 kW</td>
<td>800 kW</td>
<td>960 kW</td>
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<tr>
<td>–</td>
<td>556 HP</td>
<td>–</td>
<td>1286 HP</td>
<td></td>
</tr>
<tr>
<td>TurboBelt 1250 TPXL</td>
<td>375 kW</td>
<td>640 kW</td>
<td>1250 kW</td>
<td>1500 kW</td>
</tr>
<tr>
<td>–</td>
<td>858 HP</td>
<td>–</td>
<td>2010 HP</td>
<td></td>
</tr>
</tbody>
</table>

TurboBelt TPXL coupling in multi motor drive configuration

TurboBelt TPXL Control
- Sensor management (temperature, pressure, speed)
- Active torque & speed control
- Self-diagnosis functions

TurboBelt DriveControl
- Drive control intelligence for multi motor drive system
- Active load sharing
- Slip detection
- Condition monitoring

Seamless integration through standard communication protocols